

**Remarks:**

Applicant has read and considered the Office Action dated May 27, 2009 and the references cited therein. Claims 1, 12 and 26 have been amended. Claim 29 has been cancelled without prejudice or disclaimer. Claims 1-28 and 30-39 are currently pending. Reconsideration is hereby requested.

In the Action, claim 12 was objected to as it depends from itself. Claim 12 has been amended to correct the typographical error and depend from claim 1. Applicant asserts that the objection has been overcome and requests that it be withdrawn.

Claims 1, 7-13, 15-19, 22, 24-26, 30-32 and 34-38 were rejected under 35 U.S.C. § 102(b) as being anticipated by "SLK2701 OC-48/24/12/3 SONET/SDH Multirate Transceiver", (referred hereinafter as "SLK2701"). Claims 1 and 26 have been amended and are believed to patentably distinguish over the SLK2701 reference and any other prior art or combination thereof. Claim 1 now recites a system for broadcasting multi-channel signals to a receiving station over a two-wire bus comprising an encoder having a multiplexer for multiplexing digital data corresponding to the channel signals and producing a data stream; a framer connected to the multiplexer, for breaking the data stream up into frames, and for inserting into said frame a header containing at least a predetermined pattern; a transceiver with pre-emphasis connected to the framer of the encoder and connectable to the two-wire bus; a receiver with de-emphasis, connectable to the two-wire bus, said receiver including: a decoder connectable to the receiving station, the decoder having a de-framer for reproducing the digital data corresponding to selected ones of the multi-channel signals from the frames, said de-framer being adapted to use a previous frame when an error condition is detected in a current frame. Claim 1 further recites that the encoder has a synchronization circuit using a pattern-oriented phase-locked loop for sampling the incoming data stream using said predetermined pattern, and for regenerating a system clock; a channel selector circuit connected to the de-framer and controlling which ones of the multi-

channel signals are reproduced by the de-framer; at least two data channels, producing multi-channel signals; at least one receiving station; and a single two-wire bus, broadcasting said multi-channel signals from said data channels to each said receiving station. Applicant asserts that this system is neither shown nor suggested by the SLK2701 reference or any other prior art or combination thereof.

In addition, method claim 26 has been amended and recites a method of broadcasting high-speed applications over a serial multi-drop communication network, comprising time-division multiplexing the high-speed applications to produce a data stream; framing the data stream into frames having a header and a parity bit, the header having a size lower than 32 bits; transmitting the frames with pre-emphasis over the serial multi-drop communication network; receiving the frames with de-emphasis from the serial multi-drop communication network; detecting a predetermined bit pattern in the received frames; synchronizing the received frames using an internal clock signal and an external clock signal found within the frames following a phase comparison made after detection of the predetermined bit pattern; de-framing the synchronized frames into a selected one of the high-speed applications; producing multi-channel signals with at least two data channels; utilizing at least one receiving station; and broadcasting said multi-channel signals from said data channels to each said receiving station on a single two-wire bus. Applicant asserts that the method of claim 26 is neither shown nor suggested by the SLK2701 reference or any other prior art or combination thereof.

The SLK2701 reference teaches only a transmitter that also includes the receiving and repeating functions. It is a component that is used with network under SONET or SDH standards. The SLK2701 reference does not teach broadcasting a signal as recited in the claims wherein the signals are multi-channel signals from receiving stations in a single two-wire bus used to transmit the signals to the receivers. Moreover, the transmitter of the present application is connected to the two-wire bus and the system includes *at least one* receiver rather than only a single receiver. The second receiver 14 is connected to the bus between the first receiver and the repeater 16 such

that each receiver includes at least one decoder. The decoder is connected to the bus. Applicant asserts that the recited system and method utilizes a two-wire bus in ways that are not shown or even suggested by the prior art. The system and method use a non-obvious configuration and non-obvious steps that are not shown by the SLK2701 reference or any other prior art or combination thereof. Applicant asserts that claims 1 and 26 patentably distinguish over SLK2701 as each and every limitation of the claim is not found in the SLK2701 reference. Applicant therefore asserts that a *prima facie* case of anticipation has not been established and Applicant requests that the rejection be withdrawn. Moreover, Applicant asserts that the apparatus and method recited in claims 1 and 26 are not obvious in view of the SLK2701 reference. Applicant asserts that claims 1 and 26 and the claims depending therefrom patentably distinguish over the SLK2701 reference and requests that the rejection under 35 U.S.C. § 102(b) be withdrawn.

Claims 2-4, 14, 20, 23, 27, 28 and 39 were rejected under 35 U.S.C. § 103(a) as being unpatentable over the SLK2701 reference in view of Huang. As discussed above, Applicant asserts that claims 1 and 26 patentably distinguish over the SLK2701 reference. Although Huang teaches conversion circuits and analog signals, it does not teach or suggest a system and method as recited in claims 1 and 26 even when combined with the SLK2701 reference. Applicant asserts that claims 1 and 26 therefore patentably distinguish over the combination of the SLK2701 reference and Huang. Moreover, Applicant asserts that claims 2-4, 14, 20, 23, 27, 28 and 39 also patentably distinguish over the combination for at least the same reasons. Applicant requests that the rejection under 35 U.S.C. § 103(a) over the SLK2701 reference and Huang be withdrawn.

Claim 5 was rejected under 35 U.S.C. § 103(a) as being unpatentable over the SLK2701 reference in view of Short et al. As discussed above, claim 1 patentably distinguishes over the SLK2701 reference. The Short reference fails to remedy the shortcomings of the SLK2701 reference. Therefore, claim 1 patentably distinguishes over the combination of the SLK2701 reference and Short. As claim 1 patentably distinguishes over the combination, Applicant asserts

that claim 5 also patentably distinguishes over the combination and requests that the rejection under 35 U.S.C. § 103(a) be withdrawn.

The Office Action states that claim 5 is rejected under 35 U.S.C. § 103(a) as being unpatentable over the SLK2701 reference in view of Suzuki et al. The Office Action then discusses claim 6 and logarithmic and antilogarithmic functions. Applicant asserts that there has been a typographical error and that claim 6 was actually being rejected over the combination of the SLK2701 reference and Suzuki. Applicant asserts that claim 1 patentably distinguishes over the SLK2701 reference as discussed above. Suzuki fails to remedy the shortcomings of the SLK2701 reference. Applicant therefore asserts that claim 1 patentably distinguishes over the combination of the SLK2701 reference and Suzuki and that claim 6 also patentably distinguishes over the same combination. Applicant therefore requests that the rejection under 35 U.S.C. § 103(a) be withdrawn.

Claims 21 and 33 were rejected under 35 U.S.C. § 103(a) as being unpatentable over the SLK2701 reference in view of LaDue. Applicant asserts that claims 1 and 26 patentably distinguish over the SLK2701 reference as discussed above. LaDue teaches only a method for wireless transmitting of messages between a terminal and host computer in a wireless communications system. LaDue fails to remedy the shortcomings of the SLK2701 reference. Therefore, claims 1 and 26 patentably distinguish over the combination of the SLK2701 reference and LaDue. As claims 1 and 26 patentably distinguish over the combination, Applicant asserts that claims 21 and 33 also patentably distinguish over the combination of the SLK2701 reference and LaDue. Applicant therefore requests that the rejection under 35 U.S.C. § 103(a) be withdrawn.

Claim 29 was rejected under 35 U.S.C. § 103(a) as being unpatentable over the SLK2701 reference in view of Ahmed et al. Claim 29 has been cancelled and Applicant asserts that the rejection is moot. However, claim 26 has been amended and incorporates features of claim 29.

Ahmed teaches only a broadcasting information system using multiple optical fibers and cables between multi-channel signals and receiving stations. The Ahmed patent also teaches the SONET standard. Applicant notes that the SONET standard is different from the standard used for the present invention as it is used in a different transmission system. Applicant asserts that Ahmed fails to remedy the shortcomings of the SLK2701 reference. Applicant therefore asserts that claims 1 and 26 patentably distinguish over the combination of the SLK2701 reference and Ahmed et al. Applicant requests that the rejection under 35 U.S.C. § 103(a) over the SLK2701 reference and Ahmed be withdrawn.

A speedy and favorable action in the form of a Notice of Allowance is hereby solicited. If the Examiner feels that a telephone interview may be helpful in this matter, please contact Applicant's representative at (612) 336-4728.

Please consider this a PETITION FOR EXTENSION OF TIME for a sufficient number of months to enter these papers or any future reply, if appropriate. Please charge any additional fees or credit overpayment to Deposit Account No. 13-2725.



Respectfully submitted,

MERCHANT & GOULD P.C.

Dated: \_\_\_\_\_

8/27/09

By: \_\_\_\_\_

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